



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

February 18, 2009

CERTIFIED MAIL 7007 0710 0002 1385 7226 RETURN RECEIPT REQUESTED

Mr. Drew Fillingame
EHS Manager
Rubicon LLC
P.O. Box 517
Geismar, LA 70734

RE: Rubicon LLC Final Reissuance Petition Decision

Dear Mr. Fillingame:

Effective the date of this letter, the Environmental Protection Agency (EPA) Region 6 approves the reissuance request for Rubicon LLC's (Rubicon) exemption to the land disposal restrictions for wells 1, 3, 4 and 5 located in Geismar, Louisiana.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA to a reasonable degree of certainty that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells, codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed, and by which exemptions based on these petitions will be granted or denied.

A letter dated December 17, 2008, from Region 6 informed Rubicon that EPA was proposing to approve Rubicon's petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on December 23, 2008, and closed on February 9, 2009. No comments were received.

Based on a detailed review of the submitted petition and support documents, EPA has determined this information for Rubicon's Wells 1, 3, 4 and 5 meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this exemption to the land disposal restrictions:

Petition Reissuance Approval Conditions

This approval of the petition for reissuance of exemption to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This reissued exemption is applicable to the existing four injection wells located at the Rubicon Facility in Geismar, LA.

1. Injection of restricted waste into the injection sand shall be limited to the following injection intervals and corresponding injection zones.

	<u>Well 1</u>	<u>Well 3</u>	<u>Well 4</u>	<u>Well 5</u>
Injection zone (downdip)	2605'-5500'*	2600'-5500'	2590'-5500'	2585'-5500'
B Sands Injection zone (updip)	2605'-3900'	2600'-3855'	2590'-3840'	2585'-3810'
Upper B Sand Injection interval	3385'-3570'	3390'-3565'	3390'-3575'	3405'-3570'
Lower B Sand Injection interval	3603'-3850'	3605'-3855'	3615'-3840'	3620'-3810'
D Sand Injection zone (updip)	4000'-4800'*	4045'-4800'	4000'-4800'	4010'-4770'
D Sand Injection interval	4500'-4800'*	4545'-4800'	4500'-4800'	4510'-4770'
4800 ft Sand Injection zone (updip)	4615'-5500'*	4615'-5500'	4615'-5500'	4585'-5500'
4800 ft Sand Injection Interval	5040'-5500'*	5040'-5500'	5040'-5500'	5010'-5500'

Depths referenced to induction log for the specific well

* Depths referenced to induction log for Well No. 4

2. The cumulative volume injected in each injection interval during any given month shall not exceed that calculated by multiplying (the injection rate, gpm) (60 minutes per hour) (24 hours per day) (the number of days in that month). The appropriate maximum injection rate for each injection interval should be determined from the following table:

<u>Injection Interval</u>	<u>Injection Rate</u>
Upper B Sand	900 gpm
Lower B Sand	1,400 gpm
D Sand	1,000 gpm
4800' Sand	1,900 gpm

3. The maximum cumulative volume injected into the D Sand shall not exceed 11,045,160,000 gallons. Upon completion of any Rubicon well into the D Sand, Rubicon shall annually submit to EPA, the cumulative injection total for the D Sand. This cumulative total should include any offset injection into the D Sand from offset facilities (BASF or Lion Copolymer) since January 1, 1999.
4. The facility shall cease injection on December 31, 2025.
5. The characteristics of the injected waste streams shall at all times conform to those described in the petition for reissuance. The running three month volume weighted average specific gravity range of the waste stream injected into the Upper and Lower "B" Sands shall remain within a range of 1.034 to 1.089 measured at a temperature of 77 °F/77 °C (25 °C/25 °C). The running three month volume weighted average specific

gravity range of the waste stream injected into the "D" and 4800 ft sands shall remain within 1.025 to 1.089 at 77 °F/77 °F (25 °C/25 °C). The running three month volume weighted averages shall be calculated by multiplying each day's specific gravity value by that day's injected volume, totaling those values for the previous whole three month period, and dividing by that three month injected volume. For the purpose of the above calculation, each day's specific gravity value shall be obtained by at least one representative grab sample.

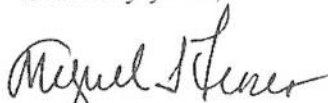
6. The approval for injection is limited to the following hazardous wastes:
D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043
F001, F002, F003, F004, F005, F006, F007, F008, F009, F010, F011, F012, F019, F020, F021, F022, F023, F024, F025, F026, F027, F028, F032, F034, F035, F037, F038, F039
K001, K002, K003, K004, K005, K006, K007, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K040, K042, K043, K046, K048, K049, K050, K051, K052, K060, K061, K062, K069, K071, K073, K083, K084, K085, K086, K087, K088, K093, K094, K095, K096, K097, K099, K100, K101, K102, K103, K104, K105, K106, K111, K112, K113, K114, K115, K116, K117, K118, K136, K141, K142, K143, K144, K145, K147, K149, K150, K151, K156, K157, K158, K159, K161
P010, P011, P012, P013, P015, P021, P022, P024, P028, P029, P030, P036, P038, P047, P048, P056, P063, P065, P073, P074, P077, P092, P095, P098, P099, P103, P104, P105, P106, P110, P113, P114, P115, P119, P120, P121
U002, U003, U006, U008, U012, U017, U019, U021, U030, U031, U032, U037, U043, U044, U047, U048, U051, U052, U055, U056, U057, U069, U070, U071, U072, U075, U076, U077, U078, U079, U080, U083, U101, U102, U105, U106, U108, U112, U115, U117, U120, U121, U122, U123, U127, U128, U130, U131, U133, U134, U136, U140, U144, U145, U146, U147, U151, U154, U159, U161, U165, U169, U170, U171, U181, U188, U190, U191, U196, U197, U204, U205, U209, U210, U211, U213, U214, U215, U216, U217, U218, U220, U221, U223, U225, U226, U227, U228, U235, U239, U328, U353, U359, U404
7. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 6 above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to 40 CFR §148.20 (e) or (f).
8. Rubicon shall annually submit to EPA the results of a bottom hole pressure survey for each well. These surveys shall have been performed after shutting in each well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium in accordance with 40 CFR §146.68(c)(1). This annual report should include a comparison of reservoir parameters determined from the falloff tests with parameters used in the approved no migration petition for verification of compliance.
9. Upon the expiration, cancellation, reissuance, or modification of the Department of Natural Resources, Office of Conservation, Louisiana's Underground Injection Control

Permit(s) for Well Nos. 1, 3, 4, and 5, this exemption is subject to review. A new demonstration may be required if information shows that the basis of granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this final approval of the petition for reissuance of exemption approval is contingent on the validity of the information submitted in the Rubicon LLC Geismar petition reissuance request for an exemption to the land disposal restrictions. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Philip Dellinger at (214) 665-7150.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Miguel I. Flores".

Miguel I. Flores
Division Director
Water Quality Protection Division

cc: Robert Smith, USEPA OGWDW
Joseph Ball, LDNR